WHAT IS CLAIMED IS:

1. A method of producing a ligand:receptor complex, comprising contacting:

a) a substantially pure or recombinant mammalian IL-1δ or IL-1ε with a receptor comprising the IL-1R6 receptor subunit; or

b) a mammalian IL-1δ or IL-1ε with a receptor comprising a substantially pure or recombinant IL-1R6 receptor subunit;

thereby allowing said complex to form.

2. The method of Claim 1, wherein:

a) said complex results in modulation of NFkB activation;

b) said receptor is on a cell;

c) said complex formation results in a physiological change in the cell expressing said receptor;

d) said contacting is in combination with an anti-inflammatory agent; or

e) said contacting allows quantitative detection of said ligand.

3. The method of Claim 2, wherein said receptor is on a skin cell.

4. A method of modulating physiology or development of an IL-1R6 receptor expressing cell comprising contacting said cell to an exogenous agonist or antagonist of a mammalian IL-1δ or IL-1ε.

5. The method of Claim 4, wherein:

A) said antagonist is:

1) an antibody which:

a) neutralizes said mammalian IL-1δ; or

b) neutralizes said mammalian IL-1ε; or

2) a mutein of said IL-1δ or IL-1ε;

B) said physiology is selected from:

1) proliferation;

2) tissue remodeling; or

3) production of inflammatory mediators, including cytokines, chemokines, or adhesion molecules; or

C) said modulating is specific for epithelial cells and not endothelial cells.

6. The method of Claim 4, wherein:

a) said antagonist is an antibody and said physiology is an inflammatory response; or

b) said modulating is specific for Th2 cells and not Th1 cells.

7. The method of Claim 4, wherein said modulating is blocking, and said physiology is an inflammatory response.

8. A method of modulating a signal to a cell mediated by IL-1δ or IL-1ε comprising contacting said cell to an administered agonist or antagonist of IL-1R6.

9. The method of Claim 8, wherein said modulating is inhibiting, and said signal is a pro-inflammatory signal.

10. The method of Claim 9, wherein:

a) said antagonist is a neutralizing antibody to IL-1R6;

b) said agonist or antagonist is administered in combination with an antagonist or agonist of CXCR1, CXCR2, or CCR6; or

c) said agonist or antagonist is administered in combination with a growth factor, cytokine, chemokine, or immune adjuvant.

11. The method of Claim 9, wherein said contacting is with another anti-inflammatory agent.

12. A method of selectively labeling a population of cells, said method comprising contacting said cells with an IL-1R6 antibody or a cytokine selected from IL-1δ or IL-1ε, thereby resulting in the identification of cells expressing IL-1R6.

13. The method of Claim 12, wherein:

a) said contacting results in modulation of NFkB activation;

b) said labeling allows purification of IL-1R6+ cells; or

c) said labeling allows depletion of IL-1R6+ cells.

14. A population of cells made by the method of Claim 13.

15. The population of Claim 14, which:

a) bind anti-IL-1R6 antibody or antiserum; or

c) are prepared by Fluorescent Activated Cell Sorting with a labeled IL-1R6 selective:

1) ligand;

2) antibody; or

3) binding compound comprising the antigen binding portion from an antibody which selectively binds IL-1R6.

16. A method of testing a compound for ability to affect IL-1R6 receptor-ligand interaction, said method comprising comparing the interaction of IL-1R6 with IL-1δ or IL-1ε in the presence and absence of said compound.

17. The method of Claim 16, wherein said compound is an antibody against IL-1R6, IL-1δ, or IL-1ε.

18. An isolated or recombinant polynucleotide which:

a) encodes at least 15 contiguous amino acid residues of SEQ ID NO: 2;

b) encodes at least two distinct segments of at least 8 contiguous amino acid residues of SEQ ID NO 2;

c) comprises one or more segments at least 21 contiguous nucleotides of SEQ ID NO: 1;

d) encodes at least 15 contiguous amino acid residues of SEQ ID NO: 4;

e) encodes at least two distinct segments of at least 8 contiguous amino acid residues of SEQ ID NO 4; or

f) comprises one or more segments at least 21 contiguous nucleotides of SEQ ID NO: 3.

19. An isolated or recombinant antigenic polypeptide comprising at least:

a) one segment of 12 identical contiguous amino acids from SEQ ID NO: 2;

b) at least two distinct segments of 8 identical contiguous amino acids from SEQ ID NO: 2;

c) one segment of 12 identical contiguous amino acids from SEQ ID NO: 4; or

d) at least two distinct segments of 8 identical contiguous amino acids from SEQ ID NO: 4.

20. A binding compound comprising an antigen binding portion from an antibody which binds with selectivity to a polypeptide of Claim 19.